"(1) A special investigation made by a government committee in 1923 estimated the cultivable area in Taiwan at 940,000 ko (900,300 hectares or 2,234,000 acres); another committee in 1929 estimated this area at 930,000 ko (893,700 hectares). (1) The area

1. Quoted by Takahashi, op. cit., p. 94.

cultivated at present is about 850,000 hectares or 23.8 per cent of the total area of the island, which is 3,576,000 hectares. If the estimates of the committees are [44] correct, then the cultivated area of Taiwan is approaching its maximum and only about 40,000 to 50,000 hectares remain to be turned into fields. We do not know what criteria the committees used in their investigations, but there are reasons to believe that their estimates are too low. Almost half of the total area of the island is territory of the aborigines, where fields are almost non-existent. It is true that this territory is mountainous and the cultivable area cannot be great, yet it should be considerably greater than 40,000 to 50,000 hectares. However, it is clear that the greater portion of cultivable land is already under the plough, so that the emphasis should be placed on other methods of increasing agricultural output.

This disparity between the growth of population and the growth of cultivated area has brought a sharp increase in land values. In 1914 one ko of good paddy land in the central

part of Taiwan province cost on the average ¥331; in 1925, ¥700; in 1937, ¥2,000. (2)

2. Ibid., p. 158.

Of course, the depreciation of the yen, the increase of yields and other factors also played a part in this increase, but the pressure of increasing population was probably also an important element."

4: Grajdanzev--47-48 S-4 (no date) 1942 Formosans
116, 433, 435, 177.43 Japan
636.43

"Furthermore, as will be shown later, the results of the improvements which did take place brought most profit to landowners, traders and the Japanese administration. This may appear to be contradicted by the fact that the gross value of agricultural production in Taiwan for the last five years increased from ¥237.9 million in 1933 to ¥413.7 million in 1937 (seventy-four per cent), and if later data were available they would certainly be still higher. Unfortunately, we do not have at our disposal an index of agricultural prices in Taiwan (1). However, we do know that the average price of [48]

1. The general index of wholesale prices in Taihoku had increased, compared with 1933, by 33 per cent in 1937 and 58 per cent in 1938. Taiwan Jijo, 1939 pp. 606, 607.

rice for the same period rose from ¥14.98 per koku to ¥22.74, or by fifty-two per cent, and rice makes up about half of the gross value of agricultural production in Taiwan. In the same years population increased by only thirteen per cent. By deflating prices to the level of 1933 and dividing by an index of population, we find some evidence that production per capita was less in real value in 1937 than in 1933. How generally this is true is difficult to say because of the paucity and unreliable character of the data. But one thing is clear: no rapid rise in the per capita value of agricultural production has taken place in the last few years."

4:Grajdanzev--53-54 S-4 (no date) 1942 Formosans -1-2
116, 243, 435, 458, 464, 177.43 Japan
636.43

"One of the important reasons for the stagnation of rice exports from Taiwan to Japan before 1922 was the unpalatable character of Taiwan rice. Through the efforts of the agricultural stations, however, a new kind of rice—horai rice—was introduced, which was acceptable to the Japanese consumer and had a higher yield than the native varieties. It commanded a lower price than the rice produced in Japan but a higher one than the local varieties. As may be seen from the preceding table [See p. 52, category 116--analyst] the average price per koku rose from ¥7.8 in 1915 to ¥22.5 in 1920. The latter year was one of post-War inflation, but 1925, a more normal year, brought an even higher price. On the basis of this rise in price and increase in acreage one might jump to the conclusion that the island farmers were much better off. Some of this increased wealth they would use to purchase Japanese manufactured goods and some to increase their own consumption of rice, so that both parties—the Japanese and the Chinese—would gain.

Japanese economists (1) share this view. In their opinion the opening of the Japanese market to Taiwan rice brought a rise in the price of Taiwanese rice, especially after

1. Especially Takahashi. He at one time was considered 'the brains of the Kwantung Army' and his works are widely known in Japan.

the depression of 1929-32. The efforts of the government to raise prices, they say, were dictated by the difficult situation of the Japanese farmers. The level of rice prices in Japan was dictated by the costs of the Japanese farmers, and these prices brought windfall profits for the Taiwan farmers. It brought a rise in rice prices in Taiwan, increased wages and unwillingness on the part of some farmers to become workers in industry just because of these prosperous conditions. Industrialization of the island (which in the opinion of Takahashi is inseparable [54] from low wages) was retarded. Now the only way out is to introduce a rice monopoly in Taiwan in order to depress the price, using the resulting difference in Japanese and Taiwanese prices for budgetary purposes (2).

2. Takahashi, op. cit., pp. 73-87."

"Space does not permit us to analyse the rice situation in detail. The table below shows the rapid process of displacement of other kinds of rice in Taiwan by horai.

Crop Area Under Various Kinds of Rice in Taiwan
(In thousand ko)

	1905	1915	1920	1925	1930	1935
Common Taiwan rice	393	423	417	370	370	263
Clutinous, round	24	39	53	81	68	73
Glutinous, long	...	...	...	...	19	18
Horai	0	0	0	72	135	305
Total	417	462	472	523	592	659

Yields of Various Sorts of Rice in Taiwan were as Follows
(1930-35 average)

	(koku per ko)
Common Taiwanese	12.1
Round glutinous	10.2
Long glutinous	11.7
Horai	14.6

As may be seen, the difference is quite pronounced—from 2.5 to 4.4 additional koku per ko, or an increase in yield of twenty to forty per cent as compared with other

varieties.

But on the other side, the production costs of one ko of common rice in 1925 were ¥223.8, while for horai the amount was ¥342.0, and—what is also very important—whereas thirty-four per cent of the production costs of common rice consisted of the farmer's own labor, home-prepared fertilizers (which the farmer does not buy) etc., these costs in the production of horai amounted to only twenty-two per cent. In other words a much greater part of the expenses on horai consisted of sums paid for commercial fertilizers, etc. and as a result, the farmer does not receive so much profit from horai, but is compelled to plant it because he cannot sell his own [55] kind of rice in the Japanese market. The expansion of area under horai is therefore not so much a sign of prosperity, as it would at first sight appear, as a sign of the growing need of the farmer for money to pay taxes, to pay for irrigation, and to pay for the tobacco which he formerly produced himself (and is now a state monopoly)."

4:Grajdanzev--55 S-4 (no date) 1942 Formosans-1-2
116, 243, 262, 435, 439

"Of course, the inclusion of Taiwan—a region of low prices—in Japan's customs area of high prices should result in an increase of prices in Taiwan, but this does not mean that Taiwan's farmers were necessarily the gainers. All prices were raised and it is by no means certain that this rise benefited farmers and workers. We may find an indirect answer to this question by calculating the average per capita consumption of cereals in Taiwan. Rice is the principal food for the islanders, and all other cereals produced there amount to less than 0.5 per cent of the production of rice and, consequently, may be neglected. Import and export data are available and Japan may serve as the standard of comparison. To simplify matters we assume that the crop of a given year and the imports of that year are consumed in the same year.

Rice Consumption in Taiwan*

	Crop (1,000 koku)	Imports (1,000 koku)	Exports (1,000 koku)	Balance (1,000 koku)	Population (1,000)	Annual per capita consumption (koku)
1905	4,354	57	620	...	3,039.8	1.25
1910	4,187	43	648	3,582	3,250.0	1.10
1915	4,785	64	767	4,082	3,479.9	1.17
1920	4,842	160	619	4,383	3,655.3	1.20
1925	6,443	718	2,057	5,104	3,993.4	1.28

*Footnote on next page.

Rice Consumption in Taiwan* [Cont.]

	Crop (1,000 koku)	Imports (1,000 koku)	Exports (1,000 koku)	Balance (1,000 koku)	Population (1,000)	Annual per capita consumption (koku)
1930	7,480	97	2,220	5,357	4,592.5	1.17
1935	9,122	7	4,493	4,636	5,212.4	.87
1936	9,559	7	4,788	4,778	5,452.0	.88
1937	9,233	7	4,842	4,398	5,609.0	.78
1938	9,619	15	4,878	4,756	5,747.0	.83
1939	9,152	8	4,106	5,054	5,880.0	.86

* In calculations made for the compilation of imports and exports before 1930 one koku of rice is taken as equal to 2.7 piculs.
Sources: for 1930-39: Keizai nenkan; for 1905-25: for production, Takahashi, op. cit.; for trade, Nippon boeki seiran. The last column is calculated."

4:Grajdanzev--61-62 S-4 (no date) 1942 Formosans-1-2
116, 241, 435, 452, 477, 655, 177.47 Japan
636.47

"It is said that there are conflicts between farmers and manufacturers because of the price, and there are also many complaints by the manufacturers that the farmers do not follow their instructions, and yet the manufacturers prefer dealing with thousands of farmers to producing all of the sugar cane themselves. The explanation is simple: it is cheaper to buy from the farmers, not only because the cultivation of [62] sugar cane is a sideline occupation for the small farmer from which he is glad to get even a small reward, but also because of the special regulations imposed on the farmers. No sugar mill can be established without official permission. Simultaneously with licensing, the area from which the new mill may buy sugar cane is allocated. It is not permitted to buy outside this area, and the farmers are obliged to sell their sugar to this mill only. For each mill there are on the average 3,000 farmers and thus there is competition between farmers inside the area, but a monopoly for the buyer. Of course, the farmer is free to sell or not to sell; to plant sugar cane or not. But, as we shall see, he has actually little choice in the matter.

The manufacturers have developed and perfected a system of advances to the farmers which deprive them of freedom in such matters. In 1935, for example, about fifteen million yen were paid out in advances. The total value of sugar cane in this year was fifty-five million yen, about one-quarter of which was produced on plantations and about

forty-one million yen worth on the tiny plots of the farmers. Thus at least thirty-seven per cent of the value of sugar cane was paid in advance. We say 'at least' because fifty-five million yen represents the official value of sugar cane in that year, though the price which the farmer gets may be much smaller than that on which the official estimate is based. It is clear that the farmer gets money in advance only because he is in need of it, and has no money of his own. Since the crop period for sugar cane in Taiwan is eighteen months, the farmer is not free in his economic decisions throughout this period."

4:Grajdanzev--63-64 S-4 (no date) 1942 Formosans-1-2
116, 241, 249, 435

"Although we have no reliable data concerning the profitability of sugar cane in Taiwan as compared with other crops, we can make certain calculations which will help us to see what the farmer gained from its cultivation. The average holdings of farmers did not increase after 1913 and therefore a larger income in these circumstances could be secured in only two ways—through an increase in yield or a rise in the price of sugar cane or both. The improved yields came as a result of the use of better seedlings, earlier ploughing, more careful attention, greater use of fertilizers, better irrigation. Some of these items demand more labor on the part of the farmer; almost all demand a greater expenditure in money. Let us now compare the receipts of the farmer per ko.

Receipts of Sugar Cane Cultivators in Taiwan

	1921	1927	1935	1936	1937
Yield per ko (1,000 kin)	63.2	89.5	102.8	114.6	112.5
Price per 1,000 kin (yen)*	9.6	7.6	3.4	4.1	4.5
Value per ko (yen)	696.7	537.0	349.5	469.9	506.3
Value per ko at 1913 prices, yen (approximately)	330.0	310.0	220.0	290.0	270.0

* For 1921-27 for the price 'the cost of raw material for manufacturers of sugar in Taiwan' is taken (Takahashi, op. cit., p. 216); for the later years, the price as it is given in the value of total production of sugar cane in Nogyo nenkan; the actual price is probably smaller.

Great accuracy cannot be claimed for these figures but they may give an idea of the trend. The yield since 1921 was doubled, but the receipts in deflated money do not show any improvement. This may be partially due to the fact that the general index of prices should not be used to deflate values in this case; a special index of prices paid by the farmer might show somewhat better results. But the expenditures which the farmer now incurs in order to secure these increased yields—fertilizers, irrigation, etc.—were not deducted, and if they are taken into consideration, one is forced to the conclu-[64] sion that some one other than the farmer got the benefits of the better yields."

4:Grajdanzev--64 S-4 (no date) 1942 Formosans -1-2
116, 241, 435, 477, 651, 177.65 Japan
636.65

"Let us now investigate another aspect of sugar cane production. Takahashi, in his book on the economy of Taiwan, (1) points out that as a result of the protective duty on

1. Taiwan Keizairon.

sugar, the Taiwanese farmers receive a subsidy which amounted in 1937 to ¥802.9 per ko. Takahashi arrives at this figure in a simple way: he multiplies the amount of customs duty per kin by the number of kin of sugar contained in the yield of sugar cane from one ko. All this is a fallacy. Let us compare the following figures:

Some Data on the Question of Protection of Sugar-Cane Culture in Taiwan

	1921	1927	1937
A. Sugar content (%)	9.5	10.3	14
B. Yield of sugar cane per ko (1,000 kin)	63.2	89.5	112.5
C. Sugar content of cane per ko (1,000 kin)	6.00	9.22	15.74
D. Value of cane per ko (yen)	696.7	537.0	506.3
E. What the farmer supposedly gets per kin of sugar content (in sen) (D:C)*	11.6	5.9	3.2
F. Protective duty per kin of sugar, standard No. 22 (in sen)	4.7	5.3	7.2

* As was mentioned above, the price in the text is based on the official estimates of the value of the crop, though the farmer probably gets a considerably lower price.

But here we are interested in the trend of the prices and not in their absolute size.

In 1921 the farmer received 11.6 sen for each kin (0.6 kg.) of sugar content, in 1927 only 5.9 sen and in 1937 3.2 sen, while the protection of sugar in the Japanese empire was increasing (in 1921 it was 4.7 sen per kin, in 1927 5.3 sen, in 1937 7.2 sen). The purpose of the duty, clearly, is not so much to protect the 'poor farmer', as to safeguard the monopoly profits of the sugar companies."

4:Grajdanzev--86-87 S-4 (no date) 1942 Formosans-1-2
116, 171, 262, 435, 439

"As to the general supply of fish for the population of Taiwan, the Japan Year Book has the following to say: '. . . The Taiwanese are a fish-eating people, but the annual catch is so great that a large quantity is exported to Japan proper [87] and other countries' (1).

1. P. 941, 1939-40 edition.

Statistics of the industry tell a different story. Compared with Japan the natives of Taiwan are poorly supplied with fish, for in 1937 the value of fishery products in Japan proper was ¥660,807 or about ¥9.3 per capita as compared with ¥3.8 in Taiwan. It is true that an important part of this catch is exported from Japan and a part is used as fertilizer, but the same is true for Taiwan. As may be seen from the following table, Taiwan is a net importer of fish:

External Trade of Taiwan in Fish
(1,000 yen)

Year	Exports to Japan	Exports to other countries	Gross exports	Imports from Japan	Imports from other countries	Gross imports	Net imports
1937	4,111	832	4,943	10,095	687	10,782	5,839
1938	3,006	491	3,497	11,535	405	11,940	8,443

116, 171, 262, 435, 439

The secret of this coexistence of exports and imports of fish does not lie in any over-abundance. The Japanese in Taiwan export fresh fish to Japan which they sell for an average price of 26 sen a kin (0.6 kg.), and import two kinds of fish: (a) salted and dried fish at an average price of 12.5 sen a kin and (b) canned fish. It is clear that these two kinds of imported fish are not consumed by the same groups of the population.

We saw above that the population of Taiwan consumes more meat on the average than do the Japanese; now we see that the Japanese consume much more fish than the islanders (2).

2. It was mentioned above that the average consumption of pork in Taiwan is about 37 kin, while in Japan it is only 3 kin; but the average consumption of fish in Japan must be, on the most conservative estimate, 60 to 70 kin."

4:Grajdanzev--88-89 S-4 (no date) 1942 Formosans -1-2
116, 137, 171, 313, 435

"The present distribution of forests and waste lands (i.e. formerly forest or which can be afforested) may be seen from the following table:

Forest Area in Taiwan, December 1936
(1,000 ko)

	On the plains	In the aborigines' territory	Total
State: forests	399,086	1,312,562	1,711,648
waste land	195,529	308,137	503,666
Public: forests	12,112	...	12,112
waste land	3,529	...	3,529
Private: forests	219,095	1,568	220,663
waste land	45,131	...	45,131
Total: forests	630,293	1,314,130	1,944,423
waste land	244,189	308,137	552,326

The Japan Year Book say: 'Reckless cutting of trees was done by Chinese immigrants and this . . . resulted in the devastation of forest districts.' But it is surprising to find that the forest area on the plains (excluding waste land) is about three-quarters of the area under cultivation. However, the exploitation of this tremendous area—2,496,749 ko or about 5.8 million acres—leaves much to be desired. According to official

statistics. the total value of forest products in 1936 was only ¥15.1 million—much less than the value of fishery products or only two per cent of the gross value of the island's production. This sum was made up of the following items: [89] timber, ¥5.6 million; charcoal. 1.9 million; bamboo, 1.7 million; firewood, 2.7 million; and others 3.2 million. If these figures are correct, then of the 2,496,749 ko, one ko brings on the average only six yen, or less than half that in Japan."

"As is well known, Japan is not a country of high wages. Yet wages there are from two to three times higher than the wages of the Chinese in Taiwan and do not seem to have been an obstacle to the development of industry. The wage level is closely connected with the level of retail prices and this we give below.

Retail Prices in Taihoku, May 1939

		(sen)
Sweet potatoes	(per kin)	6.4
Rice, horai	(per kin)	11
Sugar	(per kin)	29
Pork, average quality	(per kin)	43
Miso, per 100 momme	(0.827 lb.)	8
Fish	(per kin)	18-22
Eggs, each		6
Soap, per piece		10-17
Matches, per box		1.4
Firewood, per 100 kin		180
Muslin (per yard)		134

Now, let us take two workers—one skilled and one day laborer. For the skilled workers the average daily wage in the second half of 1938 was ¥1.43 per day. (1) for an

1. This is a simple arithmetic average of 60 different

categories of workers in Taihoku; in so far as highly paid categories are small in numbers, the weighted average would be lower. The official estimate of the average wage for Taihoku is ¥1.27.

unskilled worker ¥0.85. The average family in Taiwan consists of five to six persons. According to the prices given above, the skilled worker can buy with his daily wages, for example, either 17.2 lb. of rice or 4.4 lb. of pork, or 6.5 lb. of sugar. An unskilled worker can make such purchases as 10.2 lb. of rice, or 2.6 lb. of pork, or 3.9 lb. of sugar. By whatever standards, it is evident that the wages of the workers are very low.

The wages of Japanese workers, on the other hand, are at least double those of the Chinese for the same job. For Taihoku the official estimate of the average wage for the Chinese is ¥1.27, for Japanese, ¥2.41 (2). It is thus not profitable for the Japanese

2. A simple arithmetic average for 25 occupations of the Japanese in Taihoku gives ¥2.65.

entrepreneurs to use Japanese workers extensively."

4:Grajdanzev--126 [21 S-4 (no date) 1942 Formosans
116, 435, 453, 457

"The foremost position is occupied by the Taiwan Bank, a private corporation in charge of the monetary system of Taiwan. The great difference between the deposits of this bank and its loans is explained by the issue of banknotes, one of the many ways by which Japanese capital in Taiwan is created. The issue of notes, the reserves of gold and of foreign exchange kept by this bank, as well as the movement of wholesale prices in Taihoku. the capital, may be seen from the table on page 127.

In six and a half years the issue of notes increased three and a half times, the gold and foreign exchange reserve evaporated in the same period, and in the five years 1933-38 wholesale prices increased by about fifty per cent."

4:Grajdanzev--149-150 S-4 (no date) 1942 Formosans-1-2
116, 171, 435, 439, 177.43 Japan
636.43

"Two other aspects of Taiwan's exports should receive our attention. First, it is interesting to compare the gross value of Taiwan's production with its exports, keeping in mind that the gross value is considerably larger than its net value, i.e. by the cost of materials, fuel used in production, etc.

Comparison of the Gross Value of Production and Exports

	1903	1922	1929	1937
Gross value of production, million yen	84.5	354.2	598.6	890.5
Exports, million yen	20.7	158.4	272.0	440.2
Exports as percent of gross value	24.5	44.7	46.3	49.4

From this table it appears that in 1903 about one-fourth of the gross value was exported, while in 1937 the amount had risen to 49.4 percent. This probably means that in 1937 not less than three-fourths of the total net value of production of production[sic]of Taiwan was exported. Such a high ratio of exports to gross value of production is probably approached only [150] by Korea (1).

1. If Taiwan were to receive the equivalent in imports, the large exports would not constitute a problem. But we shall see later that this is not the case.

To see how far this situation was to the mutual advantage of the natives and the

Japanese, one should compare not only the ratio of exports to total production but also the absolute amounts which are not exported. In 1903 there remained 63.8 million yen worth of unexported goods, while in 1937 450.3 million were left. Let us now examine these figures in the light of price-changes. We have no index of prices for Taiwan in 1903, but we do have prices of rice--the most important product of the island--to which the authorities in 1937 gave a weight of 31 percent in the general index (2). A picul of

2. Actually it should be about 40 percent because the authorities gave sugar a weight of 25.3 percent, unduly large in view of the fact that more than 90 percent of the production is exported.

rice in 1903 cost 2.36 yen; in 1937, it cost 9.32 yen, or almost 4 times as much. If we also take into consideration the growth of population, the residual per capita gross production 'in rice prices' was 21.8 yen in 1903 and 19.8 yen in 1937. These are gross values of production, and since industry played a much greater part in 1937 than in 1903, the per capita net 'real' values in 1937 must actually be much smaller than in 1903. This is a startling conclusion. We emphasize again that these figures can only be approximate, yet they are sufficient to indicate the trend of events."

4:Grajdanzev--175-176 S-4 (no date) 1942 Formosans
116, 276, 435, 733

"In the early days of British commercial domination Taiwan was notorious for the prevalence of opium smoking. When the Japanese conquered the island, they decided to apply a method of licensing opium smokers. Those who were addicted to this evil practice were permitted to continue it on payment of a certain fee for a license, but no new addicts were permitted. In 1898 95,449 addicts were licensed. However, some years later a more careful survey brought to light (1) as many as 165,752. In 1908 there were

1. Y. Takagi. Japan Magazine. 1930, pp. 244-248.

119,991 licensed opium smokers, in 1926 there were 31,434 and it was said that the majority of them were over 55 years age. However, in 1938 there were 10,788 opium smokers still alive. In 1906 when there were at least 130,000 licensed opium smokers, they bought 4,395,497 yen worth of opium; in 1938, when there were only 10,788 opium smokers, they bought 1,863,063 yen worth. The explanation is that in 1906 one kilo of opium was sold by the government for 23.0 yen, in 1938, it cost 120 yen, or five times as much. This reliance on price increases, however beneficial it may have [176] been for the Treasury, has unfortunately led some addicts to turn to other, cheaper substitutes, such as morphine and heroin."

"Living conditions and the cost of living are intimately connected with the wage scale. Wages in Japan are two to three times higher than the wages of Formosans. For the skilled Formosan the average daily wage in the second half of 1938 was ¥1.13 ($.27) per day, and for the unskilled worker ¥.85 ($.17): figures based upon averages for sixty different categories. The Japanese official averages published for 1939 were ¥1.27 ($.33) for the Formosan-Chinese and ¥2.41 ($625) for the Japanese laborer. The average Formosan family consists of five persons, who must depend upon these wages. As an indication of the cost of living and the standard possible, there is presented the retail prices of some commodities in Taihoku, in May, 1939, when the yen was worth $.2596:

Table 23: Retail Commodity Prices, Taihoku, 1939

Sweet potatoes per kin (1.3228 lbs.)	6.4 sen
Rice (first grade) " " "	11.0 "
Sugar " " "	29.0 "
Pork (av. quality) " " "	43.0 "
Fish " " "	18-22.0 "
Chicken eggs, each	6.0 "
Soap per piece	10-17.0 "
Matches, per box	1.4 "
Firewood (per 100 kin)	180.0 "

Table 23: (cont.)

Miso (bean paste) (100 momme: 0.827 lbs.)	8.0 sen
Muslin, per yard	134.0 " "

241 The Farmers' Outlook. Since the Restoration, the land reform program has been carried out and farmers are enjoying a greater sense of freedom and individual initiative. However, the farmers are inclined to compare the current situation with conditions under the Japanese with regard to farm receipts, living conditions, political freedom, etc. In the eyes of the farmers, the Nationalist Government's success in its administration of Formosa has depended upon and will continue to depend upon how favorably its accomplishments will compare with those of the Japanese.

241 435 It is reported that a large disparity exists between the prices received for farm products and the prices paid for supplies used on the farm. To illustrate this point, the per chia farm receipts from all sources amounted to NT $9,700 in 1952,[17] while the per chia expenditures (for production purposes) were NT $5,400. Thus, the net earnings amount to NT $4,300 per chia, which constituted the support of 4.7 persons, the latter being the average farm population per cultivated chia.

241 208 When asked in a JCRR survey in 1952

17. New Taiwan Dollars. The prevailing rate of exchange during the year was NT $15.65 to US $1.

435
459 It should be noted that price levels have risen 700 per cent and the amount of notes issued has increased 2,600 per cent. Similarly foreign exchange has not depreciated to the same extent as the increase of money in circulation. The official exchange rate[5] for US dollars has increased from NT$5 to NT$24.78; the market rate[6] for US dollars has increased from NT$7.82 on December 31, 1949 to NT$37.50 on November 6, 1955.

458
652 The pressure of inflation on the economy of Formosa has been alleviated by a number of factors. The enormous growth in population and industrial expansion tend to absorb a part of the increased money supply. The government controls an abundant reserve of rice, wheat flour, and other essential goods, which may be used to stabilize prices. The depreciation of the external value of the currency has been partially offset by aid from the United States and the personal expenditure of United States advisory personnel in Formosa.

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5. The 1955 figure includes the bank exchange rate of NT$15.65 plus 20 per cent defense tax (NT$3.13) plus the certificate price of NT$6.00.

6. United Press dispatch, Taipei, Nov. 6, 1955.

438 belief has been, particularly in the postwar
434 years, that in Formosa more opportunities for money-making exist in trade and enterprise than in other fields.

A. Channels of Trade

438 The marketing system of Formosa is in
656 part free and in part controlled. Certain commodities are strictly in the hands of the government as far as production and distribution are concerned. Prices of some commodities
[436] are regulated and the movement of other commodities is controlled by the government. Some commodities are controlled in their production phase and some in their distribution phase. Since it is difficult to describe the marketing system in general terms, the process as it applies to a few typical commodities will be discussed.

Rice: To effect control on movements of rice, the Provincial Food Bureau has established seven food districts on the island - Taipei, Hsinchu, Taichung, Tainan, Kaohsiung, East Taiwan, and Penghu - designating each as either "surplus," "self-sufficient," or "deficient." Only the Taipei and Penghu districts are considered deficient areas. Taichung, Hsinchu, Kaohsiung, and Tianan are surplus districts. The regional movement of rice is determined at the discretion of the Provincial

442 function independently to provide sales
443 facilities for some large mills which engage only in processing.

In addition to the independent activities described above, some rural co-operatives also store, mill, and wholesale rice.

As of early 1953, there were 8,115 rice merchants of one kind or another on the island: 2,813 wholesalers, 2,305 retailers, 2,936 mill operators, 49 brokers, and 12 warehousemen.[3]

656 The Provincial Food Bureau, as well
435 as maintaining control over the movement and distribution of rice, also acquires a considerable amount of the rice produced yearly (some 30 per cent in 1951), since the government may barter fertilizer (which it controls) in exchange for rice and also receives some rice in payment of taxes. The bureau rations its rice to civil employees and sets aside a certain amount

3. Hsieh Shen-chung, "T'ai-wan Ti Nung-ch'an Yün-hsiao Chih-tu," ["The Marketing System of Agricultural Produce in Taiwan"], T'ai-wan Ching-chi Yüeh-k'an [Taiwan Economic Monthly], Vol. 10, No. 4, Taipei, April 1954, pp. 29-34. The classification used here appears rather arbitrary. It may be that those registered as wholesalers are also engaged in retailing.

each year to meet emergencies and maintain a stable market price.

Vegetables: Taipei, with a population of nearly 700,000 as of late 1955 consumes more vegetables (as well as other commodities) than other cities on the island. Vegetables for the city are produced in its suburban areas and in the regions of Taichung and Changhua during spring and winter. Yilan also supplies a sizable quantity of vegetables to Taipei (about 3,000 metric tons a year). Producers in the vicinity of Taipei sell vegetables directly to consumers or to local vegetable traders who sell to city dealers. In areas at a greater distance from the consumer, local vegetable traders sell to sales-agents, who sell to retailers at 6 per cent commission. The retailers clean and grade the vegetables before offering them to the public.

Salt: The Taiwan Salt Works, the sole producer of salt in Formosa, supplies salt directly to industrial consumers. The supply to general consumers is controlled by the Provincial Food Bureau, which has offices near railroad stations in the vicinity of the salt fields. The allotment of salt to licensed wholesalers is governed by directives from the Provincial Food Bureau.

339 656 436 Cement: Cement was originally distributed under the supervision of the Cement Distribution Secreening Committee of the Provincial Department of Reconstruction. To effect tighter control over the sale and use of all building materials, cement was placed under the supervision of the Provincial Supply Bureau in September 1953. The bureau determines allotments to building material traders' associations and cement traders' associations throughout the island; they in turn allocate cement to their members, and the members to consumers. The wholesale price is fixed, currently at NT $30 per bag (about 50 kgs.); however, the retail price is allowed to fluctuate according to supply and demand -- about NT $50 per bag in early 1955, and about NT $40 in late 1955.[4]

655 Tobacco and Alcoholic Beverages: Production and distribution of these goods are completely under government monopoly. The Taiwan Tobacco and Wine Monopoly Bureau has eleven branches and two business offices, which handle distribution of these commodities to three types of wholesale establishments -- the city, county, and town co-operatives; the

4. Kung-shang Yüeh-k'an [Industry-Commerce Monthly], Vol. 3, No. 10, p. 94; The Central Daily News, Dec. 4, Dec. 15, 1955.

655 tobacco and beverage wholesale houses; and the bureau's own wholesale offices. The tobacco and beverage wholesale houses sell directly to general retailers; all the other types of wholesalers of these commodities sell to their own retailers. All the wholesalers and retailers must be approved by the bureau, which fixes prices at both levels.

B. Small Business

443 Retail sales in large cities are handled by modern department stores, speciality stores and shops, general stores, roadside stands, and peddlers. In general the organized [435] department stores and other shops sell goods at a fixed price whereas the roadside stands and peddlers have no fixed prices. The large stores and shops generally operate at a higher cost and margin of profit than do the peddlers and proprietors of roadside stands, who are satisfied with a small profit, need only minimum capital, and pay no interest, rent, or taxes. Small business has increased in Formosa due to lack of other opportunities for employment. Enterprising people create marginal self-employment by establishing roadside stands for the sale of food and other everyday necessities., The buying public seems to favor this type of "little" business where various items can be bought more inexpensively than in

52:Barclay S-5 (nodate)1954 AD1 Formosa AD1

654 services for themselves, in order to keep output in pace with their own milling capacities.[23] The industry had expanded, in fact, too 435 rapidly for its own good. It had suffered several crises, brought on by fluctuations in the demand for sugar in Japan, where its tariff preference led it to sell.[24] To "stabilize production," the important producers organized a cartel (under the Japan Sugar Association) with government permission and guidance.

Buying of cane from farmers had from the start been controlled by agreements among processing firms; the cartel opened a concerted effort to prevent cane prices from rising. The need for this step arose from the fact that sugar cane and rice both were grown in the same soils and more or less during the same seasons. In effect, the two crops competed for land. Japanese had always complained that the Taiwanese had a perverse tendency to cultivate rice when it was more profitable. Under the cartel agreements, sugar firms avoided competitive buying by strict agreements to allocate areas of cane purchase. Owing to their size and diversity, they were able to persuade many farmers to grow sugar instead of rice by withholding irrigation water from rice fields, and by making conditional cash advances to individual families.

By such means the sugar cartel accomplished what the government could never have done unaided: it ensured a steady output of sugar at fixed prices for which it would have been irrational for individual 654 farmers to produce cane.[25] Sugar acquired a place of high wartime priority as a source for industrial alcohol, and beginning in 1939 the Government-General assisted sugar concerns to construct distilleries and make alcohol on the island. Under these circumstances it is not surprising that the sugar processing industry tended to pass into fewer and fewer hands. After a merger in 1940 more than 95 per cent of the sugar in Taiwan was milled by five giant companies. Though more extreme, the history of the sugar industry was essentially that of all large-scale Japanese enterprise in Taiwan.

655 The Government-General itself began to promote industrial ex- 471 pansion during the 1930's by further participation in economic life.

[23] Privately owned and operated railroads attained a length of over half as great as the entire state system. Not all were built by sugar concerns; the largest belonged to lumber companies. Most were of narrower gauge than the main rail lines. See *Statistical Summary*, Tables 440-442.

[24] Costs were higher than in Java throughout the period, putting Taiwanese sugar at a serious handicap in markets outside Japan.

[25] The Government-General did its part to encourage sugar cultivation by putting rice paddies in a higher tax category than comparable sugar fields. And in 1939 it simply took over the entire cartel by issuing a set of detailed regulations to dictate its affairs.